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T H E

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SOME UNITED STATES BIRDS, NEW TO SCIENCE, AND OTHER THINGS ORNITHOLOGICAL.

BY DR. ELLIOTT COUES, U. S. A.



[Based on manuscripts and collections of Lt. C. Bendire, U. S. A.]

No sooner has the press closed upon the "Key to North American Birds" than I am called upon to add to our fauna two species hitherto unknown to inhabit this country, and believed to be undescribed. But since a new bird * has lately been discovered in Massachusetts, ransacked by ornithologists for half a century, it is not surprising that the comparatively untilled fields of the west should still yield novelties; and we may rest satisfied that North American ornithology will not crystallize till it has simmered for another generation or so. During the year just closed my esteemed correspondent has been diligently collecting near Tucson, Arizona, and has frequently favored me with interesting communications and specimens. Some of his earlier notes have already been published in this Magazine; † and now I have a few more I am equally pleased to offer. Besides the two species of

* *Passerculus princeps* Maynard, Am. Nat. vi, 637. — COUES, Key, 352.

† Relating to the discovery, in the United States, of *Glaucidium ferrugineum*, *Setophaga picta*, and *Tyrannus melancholicus* var. *Couchii*. Also, to the discovery of the nest and eggs of *Helminthophaga Luciae*, *Harporhynchus crissalis*, and *Pyrocephalus rubineus* var. *Mexicanus*. In a communication dated Dec. 29, 1872, Lt. Bendire informs me of the capture, near Tucson, of *Scardafella squamosa* var. *Yncas*; a dove which, though already introduced to our fauna, has never before, to my knowledge, been taken within the limits of the United States.

birds, most of the nests and eggs to be noticed are new, at least to the public.

The Rufous-winged Sparrow* is a homely little bird, not particularly remarkable for anything I can discover, excepting the bright bay patch on the bend of the wing. It looks at first sight much like a field-sparrow (*Spizella pusilla*), that had curiously enough put on the wings of a bay-winged bunting (*Poecetes gramineus*); but on sharper scrutiny is seen to be peculiar in other points besides. I suppose it goes in the genus *Peucea*, and stands next to *P. ruficeps*; though, for that matter, our sparrows are split

* *PEUCEA CARPALIS* Coues, n. s. — Upper mandible 'turgid, its sides visible when the bill is viewed from below, its tomia inflected, the culmen slightly convex, running far on the forehead betwixt prominent antia; gonys quite straight. Wings a little shorter than the tail; 2nd to 5th primaries subequal and longest, 1st about equal to 7th; secondaries not surpassing 9th primary. Tail much rounded. Tarsus, measured in front, just shorter than middle toe and claw; lateral toes nearly equal to each other, their claw-tips falling a little short of the base of the middle claw, which the tip of the hind claw, when its digit is bent around, just reaches.

Entire crown rufous, or dull bay, only interrupted by a short pale median stripe on the forehead, and bounded by indistinct pale grayish superciliary stripes. Cervix like the crown, but mixed with gray. Scapulars and interscapulars grayish-brown, mixed with a little bay, and rather sharply streaked with blackish (thus much as in *Spizella socialis*); lower back and rump the same, but lacking the bay and blackish. Whole under parts soiled dull whitish, with faint brownish wash on sides, flanks and crissum, and entirely unmarked, excepting a short, sharp, black maxillary stripe on either side of the chin. All the lesser wing-coverts chestnut, very nearly as conspicuous as in *Poecetes gramineus*; other coverts, and inner secondaries, with dark brown central field, and pale grayish-fulvous edging. Primaries and tail feathers dull dark brown with slight whitish edging. Bill apparently reddish flesh color, but most of the upper mandible dusky. Feet whitish-brown, the toes rather darker than the tarsus. Length (fresh) 6·00; extent 8·25. Length (dried); about 5·25; wing 2·50; tail 2·75, its graduation ·50; bill along culmen ·40; tarsus ·66; middle toe and claw ·70. (Inches and decimals.)

TYPE. No. 2689, Mus. E. C., since deposited in Mus. S. I.; Tucson, Ariz., Sept. 1872. (*Bendire*.) It is unmarked for sex, and in poor condition, preserved in the flesh with carbolic acid. The plumage likewise is much worn; in better state the colors may be brighter and purer than as described. Very young birds are probably streaked below, as in other young *Peucea*, *Spizella*, etc.

This species does not resemble any other, with which I am acquainted, sufficiently to require comparison. Doubting lest it might be already described among its Mexican allies, I sent the specimen to the Smithsonian, where it was examined by Prof. Baird and Mr. Ridgway. The species may be instantly recognized by the chestnut flexure of the wing, as in *Poecetes*, in combination with the particular size and proportions, as above given.

P. S., April 7, 1873. — Better specimens, since received, confirm the above surmise. The under parts are pure white, shaded on the sides and across the breast with clear pale ash, on the flanks and crissum with grayish-brown. The pure white chin is bounded by a sharp black line on either side, above which is another, less conspicuous, from the angle of the mouth. Crown and bend of wing alike rich chestnut. Quills and tail feathers blackish-brown, edged as above said, but tail feathers also slightly white-tipped. Markings of back, as described, sharp and pure. Greater wing coverts blackish, with light fulvous edging and whitish tipping. "Iris brown." Fresh, length 5·75; extent 7·80: ♂; taken Jan. 10, 1873.

into so many "genera" that nobody could sort them out if they were once mixed up; it is only by the peculiar process, known to ornithologists, and others, of calling a spade an agricultural implement, that they are perpetrated and perpetuated. Lt. Bendire says this sparrow is very common where he is, and that it stays there all the year; that he generally finds it in company with the black-throated finch (*Poospiza bilineata*), the habits of the two being much the same, and the nesting quite alike. The rufous-winged sparrow builds in a small mezquite or sage bush, often close to the ground and rarely over four feet from it. The nest is made of fine dry grasses and roots, with slender tops of "sacaton" (rye grass) and sometimes a few horse-hairs; it is quite deep, let down into a fork or crotch. The eggs are said to be almost exactly like those of the following bird, only a trifle larger, and four or five to a clutch, instead of three or four.

The Black-throated Sparrow (*Poospiza bilineata*) is a much prettier, jaunty-looking bird, with a jet black throat and face set off with pure white stripes. It is common on and near our southwestern border. I frequently saw it in New Mexico and Arizona, at different seasons, but never found a nest, and do not know who was more fortunate until Lt. Bendire gathered quite a large lot. One of them now lying before me is composed of fine grass-stems mixed with much more of very soft-fibred inner bark of some plant I do not recognize, and lined with a little horse-hair. It is marked "Sept. 14th, 1872;" and I may as well mention here as elsewhere, that the laying season of several Arizona birds besides this one is protracted through September.* A set of eggs, taken August 25, numbers three; size, $.73 \times .58$, $.74 \times .58$, and $.72 \times .57$, respectively. These are perfectly plain, white with a faint bluish cast; but occasionally—Lt. Bendire says about one set in twelve—the eggs are sparsely speckled with reddish. He continues:—"This bird is plentiful about here, and resident. It prefers higher ground, two hundred to five hundred yards from the creek bottom, though seldom further out on the plain. The nest is placed in a small mezquite, thorn or sage bush, seldom over four feet high, often almost on the ground. The clutch is usually three, rarely more. Two if not more broods are raised each season. I found fresh

*The following birds were still laying Sept. 13—*Campylorhynchus brunneicapillus*, *Poospiza bilineata*, *Pipilo Aberti*, *P. "mesoleucus"*, *Zenaidura Carolinensis* and *Chamepelia passerina*.

eggs Sept. 3. The usual note is *zib, zib, zib* and a twitter, something like the sound of a coin spinning on a table."

Abert's Towhee (*Pipilo Abertii*) and the Cañon Towhee (*Pipilo fuscus* of Swainson, not of Cassin: *P. mesoleucus* of Baird; Key, 152) are two large species related to our chewink, but dull colored (grayish, etc.) instead of black, white and chestnut. They inhabit the Colorado valley and its vicinity, though Abert's, at least, seems closely confined to the river itself and its tributaries. Both are abundant, and they live together; Abert's is the bigger, and the eggs are readily distinguished. A clutch of *P. Abertii* eggs containing three, taken September 4th, measure $.95 \times .78$; $.94 \times .77$; and $.95 \times .77$; they are plump eggs, broad for their length, little smaller at one end than at the other. The color is bluish-white, sparsely marked, and chiefly at the larger end (where the markings form a splashed area, not a ring), with dark reddish-brown; some of the markings are very fine speckling, others are short, sharp zigzag lines; the general tone of the markings is very dark, as I have said, but some of the spots are quite light reddish, while others (in the shell, and consequently overlaid with its ground color) are neutral tint. The egg is decidedly peculiar, as compared with that of the other species, and recalls some of the least variegated samples of red-winged blackbird eggs, though still the markings are mostly spots, rather than streaks. — Two eggs of *P. fuscus*, taken Sept. 3, measure $.95 \times .72$, and $.95 \times .70$: thus being as long as those of *Abertii*, but very noticeably narrower, and more pointed at one end. The ground color is pale bluish; the whole surface is marked — thickly at the large end, where the spots tend to a ring, more sparsely elsewhere — with light brownish-red; a few of the (heaviest) spots are darker brown, and many others are neutral tint, or lavender. The marks range in size from mere points to moderately large spots; still they are all *spots*, none lengthening into lines, as is the case with those of *Abertii*.

The Ground Cuckoo (*Geococcyx Californianus*) is a large species of singular aspect and peculiar ways, noted for its swift-footedness, inhabiting the Southwestern Territories and California, and abundant in Southern Arizona. An egg of this bird that Lt. Bendire sent me, and the first one I remember to have seen, measures 1.55×1.25 , being thus broadly ellipsoidal; the greatest diameter is near the middle, and hardly any difference in size of the two ends is appreciable. It is plain dull white, and looks something

like an owl's egg. My correspondent has noted, he says, a curious fact: — that several birds lay more eggs toward the close of the season than earlier, and he particularly instances the present species. He never found more than three eggs in April and May clutches; but four, five or six in July and August sets. He thinks it may be accounted for by the greater abundance of food after the midsummer rains.

The Painted Flycatcher (*Setophaga picta*) allied to our common redstart, is a beautiful black, white and carmine species which Lieut. Bendire has the credit of first finding in the United States (Am. Nat. vi, 436; Key, 110). Since last spring, when he secured and forwarded the first specimen, he has seen two others (Sept. 12); they were foraging for insects in a mezquite tree, and seemed to be on their way home to Mexico, from the mountainous part of Arizona, where, it is presumed, they passed the summer breeding.

The nest and breeding habits of the beautiful little Vermilion Flycatcher (*Pyrocephalus rubineus* var. *Mexicanus*) have lately been described in this Magazine by Lt. Bendire himself; but here I wish to notice another nest, since received from him. It was despoiled April 27, 1872. It is a low flat structure, which was saddled close down on a large horizontal fork, as I see by the impression of the boughs. Outside and underneath there are some quite large but light plant stems, two or three inches long; the substance of the nest is an inextricably mixed mass of very slender grass, fluffy inner bark, dried moss, horsehair, and white sewing-thread; the lining is a thick warm bed of large pigeon feathers — I think from the breast of a male Carolina dove. The nest is only about an inch deep, though it measures outside three inches across the brim; were it not for the few sticks, and some of the ragged strips, it might be called exquisitely light and delicate.

Nuttall's Whippoorwill (*Antrostomus Nuttallii*) is a beautiful and interesting species, abundant in many parts of the West, from the Missouri region into Mexico, replacing the common Eastern species (*A. vociferus*). It is smaller than the latter, and somewhat differently colored, with a nearly square instead of much rounded tail. It does not cry "whip-poor-will" like our species, but drops a syllable, saying "whip'-poor" or "poor'-will" as the fancy of the hearer may interpret. But the most singular circumstance is, that it lays white or creamy-white eggs, entirely

unmarked — a thing before unknown in this genus. The eggs are two in number, laid in a mere shallow depression of the bare ground, usually at the foot of a bush — Lt. Bendire found them so, August 2, 1872. When he informed me of this I could not help thinking there was some mistake about it; but on communicating with Prof. Baird on the subject, he replied: "Nuttall's whippoorwill is unique in the genus for laying white eggs. We have several sets of them, and have established the fact beyond question." This is equally novel and interesting; but how about Dr. Sclater's generalization,* which I adopted without qualification in the Key (p. 180), to the effect that all the *Caprimulginae* lay colored eggs? I think it is easier to stand corrected in this instance than to disturb the bird's position.

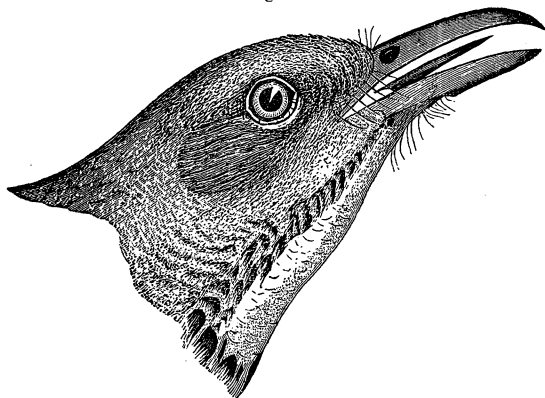
The presence of a sharp horny spur on the shank (tarsus) is a very common character of gallinaceous birds, well illustrated in the case of the barnyard cock; and in some birds of this order there are a pair of spurs, one above the other, on each leg. The turkey gobbler (*Meleagris gallopavo*) is well known to possess a pair, and this is supposed to be a constant character of the males of the genus *Meleagris*. Such, however, proves to be not always the case. "The males do not all have spurs; in fact, I thought at first that the variety of turkey we have in Arizona never had any, and I have been so informed by Mexicans and Indians. But I killed two gobblers myself a few days ago, and both were spurred; though the largest bird I ever killed, a male weighing twenty-eight pounds, had no spurs." (*In epist.*, Dec. 29, 1872).

Almost every one knows the Brown Thrush, or Thrasher (*Harporhynchus rufus*) of the Eastern United States — an abundant and familiar inhabitant of shrubbery, and a spirited songster, with some talent for mimicry. It belongs to the mocking-thrush group (*Miminae*) all of which are famous for their vocal powers; the cat-bird, and the princely mocking-bird itself, are near relatives. The accompanying cut (Fig. 65) looks something like a thrasher in the act of singing. There is a Texan and Mexican variety of this bird, very similar, but longer billed, darker colored, and more heavily streaked underneath. The genus *Harporhynchus* (which means "bow-billed") contains several other species, equally interesting, and seeming to us the more remarkable on account of the extraordinary length and curvature of the bill. All these in-

*Proceedings of the Zoological Society, Feb. 1866, p. 127.

habit our southwestern border ; they are much alike in color, differing from our rich foxy-red thrasher very nearly as the homely gray pipilos of the same region differ from the smartly-dressed chewink — being pale dull brownish or grayish, with few or no definite markings, except in one instance. Let us pass them in review, so as to be better able to judge of a certain new species I am going to describe. I will first mention the St. Lucas Thrush (*H. cinereus*) ; it agrees with the thrasher, and differs from all the rest, in being thickly speckled with brownish-black over most of the under parts. It is dull brownish-gray above ; the shape of the bill is shown in figure 70, beyond. We shall have to look at this species again, presently. Next, we have the Californian Mocking-

Fig. 65.

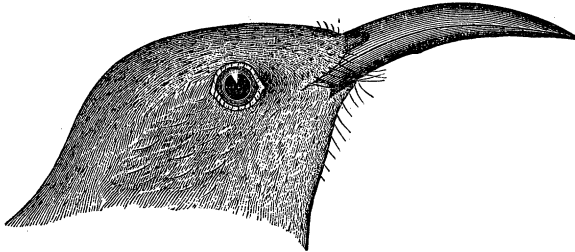


Brown Thrush (natural size).

thrush (*H. redivivus*. Fig. 66). Its points are—the long arcuate bill ; dark olive-brown color, paler below, gradually changing to rusty-brown on the belly and to rusty-white on the throat ; heavily streaked ear coverts, but no maxillary stripes nor spots on the breast ; length eleven inches or more, wing four or less, tail five or more, bill and tarsus, each, about $1\frac{1}{2}$ inches. This is the dark California coast form. In the arid Colorado river region, there is a variety of the same bird, identical in size, form and *pattern* of coloration, but extremely pale-colored, as if really bleached with the heat and dryness of the desert. It is apparently very rare ; I never saw but two specimens, one of which I was fortunate enough to shoot myself, and only know of two others, which Dr. Cooper secured when he was at Fort Mojave. This is Leconte's

Mocking-thrush (*H. redivivus* var. *Lecontei*); I did not think it necessary to make a drawing of it, because an uncolored cut would show precisely like fig. 66. Next comes the Red-vented, or Crissal Thrush (*H. crissalis*); also inhabiting the Colorado and Gila valleys. It is fully as large as *redivivus* or var. *Lecontei*, with the tail even longer, and the bill, if not larger, at least slenderer and

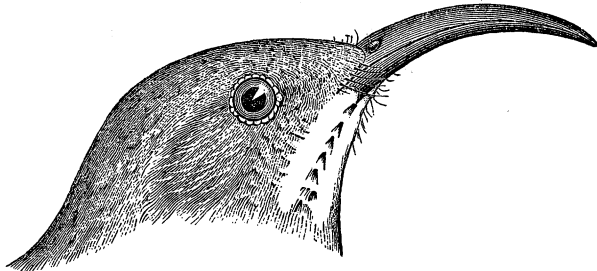
Fig. 66.



Californian Mocking-thrush (natural size).

more arcuate, as shown in fig. 67. Although unspotted, and otherwise colored much like *redivivus*, it is immediately distinguished by having the under tail-coverts rich chestnut (like a cat-bird's — the contrast is quite as great), and by the presence of a sharp, black maxillary line bounding the definitely white throat. Lt. Bendire gave the first good biographical notice of this species

Fig. 67.

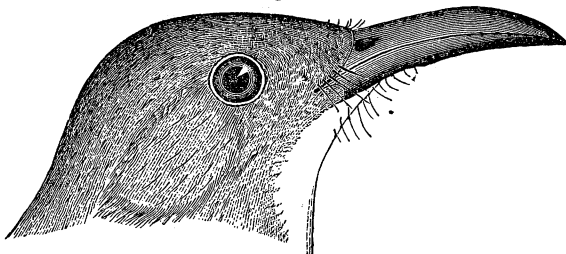


Crissal or Red-vented Mocking-thrush (natural size).

(Am. Nat. vi, 370); the eggs are $1\ 10 \times \cdot 80$, large, emerald green, unmarked. Again, we have the Curved-billed Thrush (*H. curvirostris*) in which, notwithstanding its name, the bill is much less curved than in either of the last two; the shape is shown in fig. 68. This bird is about as large as *redivivus*; its peculiarities, aside from the bill, are, the duller coloration, pale fulvous under tail-

coverts, no maxillary stripe (no markings whatever about the head excepting some vague speckling on the cheeks), and the underparts obscurely marked with large dark gray spots on a pale gray ground, producing an appearance of clouding or marbling rather than speckling. The true *curvirostris* inhabits Mexico; the Arizona representative constitutes a variety (*Palmeri*. Fig. 68). I

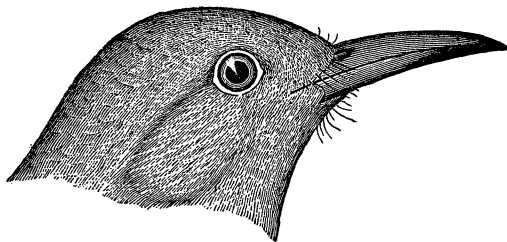
Fig. 68.



Palmer's variety of the Curved-billed Mocking-thrush (natural size).

described it accurately in the Key, p. 351, from Lt. Bendire's specimens, adopting Mr. Ridgway's then unpublished name, "*Palmeri*." Its habits appear to be the same as those of *crissalis*; both birds build in cactus and other low bushes, and their eggs are of the same size. The egg of Palmer's thrush, however, is not like

Fig. 69.



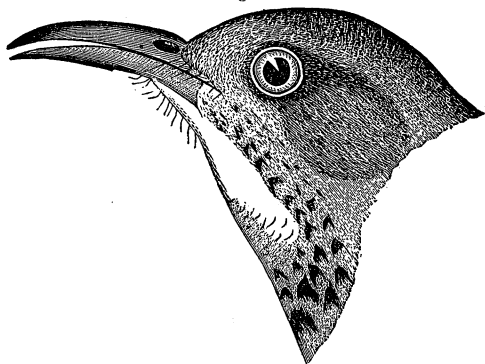
Bendire's Mocking-thrush (natural size).

that of the crissal thrush in color, being dull pale greenish, speckled evenly all over with brownish-red.

Besides all the foregoing, there is another kind of mocking thrush in Arizona, hitherto unknown to naturalists. Soon after I received my first specimens of var. *Palmeri*, Lt. Bendire sent me a bird I could not make out at all; and not having then specially studied these birds, I sent it to Mr. Ridgway, asking him to look over the Smithsonian series and see what it was. He promptly

returned the specimen, saying it was the *female* of his var. *Palmeri*. This puzzled me, for I knew of no such sexual differences in this genus as the specimen presented in comparison with var. *Palmeri*; but presuming, of course, that he knew his own species better than I did, I felt obliged to rest on what he told me, though I was dissatisfied, and in penning p. 351 of the Key, with the specimen before me, refrained from alluding to the (supposed) female of var. *Palmeri*, concluding to await developments. I wrote to Lt. Ben-

Fig. 70.



St. Lucas Mocking-thrush (natural size).

dire, who replied at once that the bird was an entirely distinct species, laying a very different egg, and having somewhat dissimilar habits; and he finally settled the case by sending me a male skin, precisely like the original female specimen, together with several of both sexes of var. *Palmeri*, all alike different from the new bird. A glance at figure 69, as compared with figure 68, will show that Bendire's Thrush,* as it may be appropriately named, has a very

* *Harporhynchus Bendirei* Coues, n. s. (Fig. 69).—Bill shorter than head, comparatively stout at base, very acute at tip, the culmen quite convex, the gonys however only just appreciably concave. Tarsus a little longer than the middle toe and claw. Primaries:—3d and 4th about equal and longest, 5th and 6th successively slightly shorter; 2d equal to 7th, 1st equal to next to innermost secondary in the closed wing. Tail little longer than the wings, moderately rounded. *Male*. Entire upper parts, including upper surfaces of wings and tail, uniform dull pale grayish-brown, with narrow, faintly rusty edgings of the wing coverts and inner quills, and equally obscure whitish tipping of the tail feathers. No maxillary nor auricular streaking; no markings about the head excepting some slight vague speckling on the cheeks. Under parts brownish-white, palest (nearly white) on the belly and throat, more decidedly rusty-brownish on the sides, flanks and crissum, the breast alone marked with numerous small arrow-head spots of the color of the back. Bill light colored at base below. Length about 9.25 inches; wing 4; tail 4.25, bill (chord of culmen) .87; bill (along gape) 1.12; tarsus (in front) 1.25; middle toe and claw 1.12. *Female* not distinguishable from the male (the

differently shaped bill; and it is, besides, much smaller, and differently colored. The relationships of the new species are really with the St. Lucas thrush, rather than with Palmer's; for although the markings appear quite different, when we compare the sharp speckling of the under parts of *cinereus* with the faintly spotted breast of *Bendirei*, yet this difference might be produced by climatic influences, just as we have seen in the case of *Lecontei*. The size is the same; and it is the difference in the shape of the bill, in the relative lengths of the tarsus and toes, and in the wing-formula, rather than the coloration, that has caused my present decision, that *H. Bendirei* is not a desert race of *H. cinereus*.

Bendire's thrush is much rarer, in Arizona, than either the crissal or Palmer's. It is resident in the southern portion of the Territory. It builds preferably on trees, sometimes thirty feet high, instead of on bushes. The egg is only $\cdot96 \times \cdot70$; its color, grayish-white, with spots and larger blotches, principally about the greater end, of two shades of pale reddish-brown, with some lilac and lavender.

single specimen is rather smaller (wing 3.75 etc.) and still paler, duller brownish above; but this is owing to worn plumage, if not also, in part, to mummification with carbolic acid).

Types: ♂, no. 2687, mus. E. C.; Tucson, Ariz., Nov. 9, 1872. ♀, no. 2688, mus. E. C.; Tucson, Ariz., July 28, 1872. (*Bendire*.)

Allied to, and in some respects intermediate between, *H. curvirostris* var. *Palmeri*, and *H. cinereus*; coming nearest to the latter. Differs from var. *Palmeri* in being much smaller, with much shorter and differently shaped bill, different proportions of tarsus and toes, and markedly different coloration; the upper parts of var. *Palmeri* are a pure dark shade of grayish-brown with a tinge of olive, and the spots of the underparts are large, blended and diffuse, giving a marbled appearance. The average measurements of four specimens of both sexes, of var. *Palmeri*, are:—length 10.75; wing 4.33; tail 5; chord of culmen 1.12; tarsus 1.25; middle toe and claw rather more. In *H. cinereus*, of which a cut is herewith given (fig. 70), the bill, of about the same length as in *Bendirei*, is decidedly more curved; the tarsus is not longer than the middle toe; the 3d to 6th quills are subequal and longest, the 2nd being subequal to the 8th; and the under parts are as distinctly and heavily spotted as in *H. rufus* itself. The size is about as in *Bendirei*, and the coloration of the upper parts is much the same.